

**DYNAMIC RESOURCE ALLOCATION ARCHITECTURE  
FOR DIFFERENTIATED SERVICES OVER  
BROADBAND COMMUNICATION NETWORKS**

**ABSTRACT**

Dynamic resource allocation that provides differentiated services over a broadband communication network. The system comprises a gateway that interfaces to an Internet service provider or corporate network, a local area network edge device, a satellite that provides a communication link between the gateway and the local area network edge device, and one or more personal computers coupled by way of a network to the local area network edge device. The dynamic resource allocation system supports differentiated services with different levels of priority and comprises an Internet protocol network that includes a classifier for identifying specific types of messages, and a dynamic assignment/multiple access (DAMA) communication protocol for transmitting data over the system.